

RAID DISK HAVING CACHE MEMORY IMPLEMENTED USING NON-VOLATILE  
RAM

ABSTRACT OF THE DISCLOSURE

A computer implemented cache memory for a RAID-5 configured disk storage system to achieve a significant enhancement of the data access and write speed of the raid disk. A memory cache is provided between the RAID-5 controller and the RAID-5 disks to speed up RAID-5 system volume accesses. It utilizes the time and spatial locality property of parity blocks. The memory cache is central in its physical architecture for easy management, better utilization, and easy application to a generalized computer system. The cache blocks are indexed by their physical disk identifier to improve the cache hit ratio and cache utilization.